

Commonwealth of Kentucky Energy and Environment Cabinet

Steven L. Beshear, Governor

Leonard K. Peters, Secretary

CONTACT: Allison Fleck, 502-564-3410

FOR IMMEDIATE RELEASE

$\label{lem:condition} \textbf{Drinking water wells sought for groundwater study}$

Water samples will be tested for bacteria

FRANKFORT, Ky. (June 28, 2012) – The Kentucky Division of Water (DOW) is seeking permission from owners and/or users of private drinking water wells statewide to obtain groundwater samples.

The project is part of a targeted study to determine if domestic water wells are being impacted by human-influenced pollution and/or events of nature. Owners of wells selected for inclusion in the study will receive free testing of their well water.

Water collected from water wells will be tested for *Escherichia coli* (*E. coli*) and total coliform bacteria that are found in untreated human and animal wastes, as well as for the presence of iron-related bacteria, sulfate-reducing bacteria and slime-forming bacteria. Samples will also be tested for caffeine.

Phil O'dell, a geologist with the DOW Groundwater Section, said contamination of well water can be a one-time event or a continuous problem, depending on the circumstances surrounding the particular well.

"Bacteria may enter a well through repair work or flood conditions, in which case a onetime disinfection generally takes care of the problem," O'dell said. "In other cases bacteria may be seeping in from a leaking septic tank nearby, in which case a finding of caffeine would be a good indicator that wastewater going down a kitchen drain is bypassing the septic tank and entering the groundwater."

Owners whose wells are found to be positive for bacteria will be advised on well disinfection procedures and, if needed, the use of continuous water treatment methods such as filtration, chlorine feeding and use of ultraviolet light for water treatment.

While public drinking water supplies are regulated by the Commonwealth of Kentucky under the Clean Water Act, private water supplies are not regulated by state or federal law. Unlike the regular monitoring of public drinking water systems serving many people, there are no experts regularly checking the water coming from private wells. These households must take special precautions to ensure the protection and maintenance of their drinking water supplies.

"If your drinking water comes from a private well, you as the well owner or user are responsible for the water's safety," said David Jackson, supervisor of the DOW Groundwater Section, which is performing the well water study. "Our agency and the U.S. Environmental Protection Agency recommend that well users test their well water annually for bacteria, nitrates/nitrites and any other contaminants of local concern."

Jackson added that testing should occur more frequently if:

- there is a change in the taste, odor or appearance of the water.
- well breakage or repairs have taken place.
- a household member or guest experiences gastrointestinal illness.
- an infant lives in the home.

Owners and/or users of private drinking water wells who would like to participate in the study should contact Susan Mallette at DOW at 502-564-3410 or by email at Susan.Mallette@ky.gov.

For more information about drinking water well care and maintenance, visit the EPA website at http://water.epa.gov/drink/info/well/. To obtain a list of certified water testing laboratories, visit http://water.epa.gov/scitech/drinkingwater/labcert/statecertification.cfm.

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